

CONTRIBUTIONS TO A KNOWLEDGE OF THE HYMENOPTERA OF BRAZIL,  
No. 7—EUMENIDÆ (GENERA ZETHUS, LABUS, ZETHOIDES,  
EUMENES, MONTEZUMIA AND NORTONIA.)

BY WILLIAM J. FOX.

The present paper, the seventh of the series dealing with Mr. H. H. Smith's collections, relates to the solitary wasps, and is presented in incomplete form in consequence of the want of available time for entomological work on the part of the writer. These pages were written almost a year ago, and laid by with the hope of soon working out the material of the genus *Odynerus* thereby completing the Eumenidæ of the collection, which hope, however, has not been realized, beyond the drawing up of several descriptions of new species which will be included in a separate paper on that genus.

A. Pedicel of second segment shorter than width of first segment at apex.

a. Postscutellum entire.

*Zethus cæruleopennis* Fabr.

Chapada, February, March, December; Santarem. Seven ♀, five ♂ specimens.

*Zethus recurvirostris* DeG.

A large series of both sexes. Chapada, January, March, December.

The color of petiole and legs varies from entirely red to black. The swelling of the petiole is much greater in some specimens than in others.

*Zethus gigas* Spin.

Chapada, February, March. Twenty-five ♀, three ♂ specimens.

There is a remarkably abnormal specimen of this species in the collection. It is a ♂, and has the petiole produced into two long acute spines on the ventral surface laterally, that on the right side placed some distance in advance of the other. The occiput is emarginate medially, and that portion of the front filling the

emargination of eye is pushed out, distorting the eye, so that when viewed from the side it appears to be sharply angulate, or subdentate on its inner margin.

*Zethus prominens* n. sp.

Black, shining; middle segment, petiole, base of second segment, legs, clypeus except base, mandibles and scape beneath, red; apex of petiole with a yellow line on each side, extending a little along sides; wings violaceous.

♀.—Clypeus about one-third broader than long, obtusely angular at sides, with shallow punctures, fore margin broadly incurved, obtusely dentate medially; mandibles long, equalling the width of clypeus in length; front and vertex with tolerably strong, but not deep, scattered punctures, becoming obsolete on cheeks posteriorly; space between hind ocelli slightly less than that between them and eyes; first joint of flagellum fully as long as two following united; pronotum with a strong tooth on each side, and sharply margined anteriorly; dorsulum sparsely punctured, with an impressed line anteriorly in the middle, on each side of which are two feebler, curved impressions, and posteriorly in the middle are two parallel strong impressions, with a feebler longer one on each side; scutellum flat, scarcely impressed; postscutellum subconvex, entire; middle segment concave medially, the lateral surface separated from the upper and posterior by a sharp ridge, running from base to apex; enlarged portion of petiole with sparse punctures, broadest and rounder at base, the sides gradually converging to apex, not rounded, the slender basal portion not as long as hind coxæ; second segment with a short, thick pedicel whose length does not equal the width of petiole at apex, microscopically punctured above, the ventral moiety with large punctures, very sparse toward base; dorsals 3-6 rather compactly punctured, ventrals 3-6 with strong, separated punctures; second submarginal with a distinct radial side, which is, however, a little less than the distance between the recurrent nervures on the cubital nervure. Length 28-29 mm.

Chapada, March, April. Four specimens. In coloration this species resembles *recurvirostris*, but it is quite distinct. The straight, not rounded or convex, sides of petiole and sharp lateral carina of middle segment are salient features of this insect.

*Zethus striatifrons* n. sp.

Black; clypeus anteriorly and at sides, mandibles medially, greater part of scape, outer margin of tegulae and legs except coxae, red; petiole with a narrow yellow line at apex, extending a little along sides; wings violaceous.

♀.—Clypeus nearly twice as broad as long, strongly angulate laterally, striato-punctate, the fore margin subemarginate; mandibles short, broad, their width equalling half their length, with coarse, elongate punctures; front striated, the vertex with separated punctures; space between hind ocelli distinctly less than that between them and eyes; first joint of flagellum fully as long as next two joints united, the length of scape about equalling the pedicel and first four joints of flagellum; pronotum margined anteriorly, but not dentate, strongly punctured; dorsulum strongly punctured, sparsely so posteriorly with a strong impression anteriorly in middle, and two rather parallel, less strong ones posteriorly; scutellum rather flat, not or slightly impressed, post-scutellum entire; middle segment with rather dense pale pubescence, strongly impressed, or subconcave in middle, with transverse, coarse striations extending a little on sides, but not evident at base laterally, the extreme base in addition has some coarse punctures and there is a sharp ridge (not extending to apex) separating the sides from the rest of segment; swollen portion of petiole ovate, about twice as long as broad, with large sparse punctures, basal cylindrical portion about as long as hind coxae, transversely ridged at base above; second segment with a short, thick pedicel, dorsally with shallow punctures, sparse at base, and in addition a fine, microscopic punctuation, ventrally with coarse irregular punctures; remaining dorsals closely punctured, the ventrals more strongly; second submarginal cell with a radial side not equal to more than one-third of the distance between the recurrent nervures on the cubital nervure; third submarginal fully one-third broader above than beneath, the outer nervure almost straight. Length 22–23 mm.

♂.—Clypeus longer, not angulate laterally, with shallow punctures, the fore margin with a strong tooth on each side; front finely rugoso-granulate, a slender raised line running down from the anterior ocellus; scape dilated apically; antennae terminating in a hook, not coiled; impressions of dorsulum less distinct, the dorsu-

lum distinctly impressed; ventral abdominal segments without appendages. Length 19–21 mm.

Chapada, March, October, December. Seven ♀, two ♂ specimens. *Striatifrons* comes closer to *chalybeus* than to *erruleopennis* and *recurvirostris*, both of which have the clypeus rounded at sides, and their ♂ abdomen is provided with leaf-like appendages beneath.

**Zethus chalybeus** Sauss.

Chapada, April; Santarem. Four ♀ specimens.

**Zethus sessilis** n. sp.

Black; abdomen with a grayish pile; mandibles medially, spot on tegulae, legs more or less, and sides of petiole dark reddish or reddish brown; wings fuscous as far as stigma, darkest in costal cell, otherwise clear.

♀.—Head with strong even punctures not close, the front with some rugae in addition; clypeus longitudinally rugose or rugosopunctate, subrounded at sides, about one-third broader than long, truncate anteriorly and with two widely separated teeth; space between hind ocelli equal to more than half that between them and eyes; scape shining, in length equal to the pedicel and following four joints united; pronotum very sharply and highly margined or crested, but scarcely dentate; dorsulum coarsely punctured with an impressed line anteriorly in middle, and four feebler ones posteriorly, the two medial impressions strongest and farther apart than they are from the exterior ones; scutellum subconvex, impressed; postscutellum entire; middle segment rugose except medially, where it is concave or broadly depressed and like the sides finely punctured, a faint trace of a carina between the upper surface and sides; swollen portion of petiole short, campanulate, with dense shallow punctures, the basal stem longer than hind coxae; second segment practically sessile with first, the pedicel being exceeding short; dorsal surface of abdomen with a fine dense punctation, that on ventral surface quite as fine, but not so dense. Length 13–14 mm.

♂.—Head not or scarcely striated as in ♀, coarsely punctured; clypeal teeth stronger; space between hind ocelli less; apical antennal joint exceedingly minute, not one-third the size of the preceding one, and so placed as to form a small hook. Length 13–14 mm.

Chapada, February, March. Fifteen ♀, five ♂ specimens. The almost sessile second segment, and minute apical antennal joint of male, readily distinguish this species. The male clypeus is sometimes marked anteriorly with yellow.

*Zethus fraternus* Sauss.

Chapada, February to April, December; Pedra Branca and Corumba, April; Santarem. Twenty-three ♀, six ♂ specimens. The yellow dots above insertion of antennæ are frequently entirely absent.

*Zethus rufipes* n. sp.

Black; mandibles medially, anterior margin of clypeus, base of antennæ, spot on scape at apex beneath, and legs except coxæ, ferruginous; a dot on front behind each antennæ and line at apex of petiole (not extending on sides), yellow; wings dark violaceous throughout.

♂.—Head with strong but not deep punctures, closest and smallest on front; a faint carina connects the bases of the antennæ; clypeus with separated punctures, about one-third longer than broad, its fore margin truncate, and armed with two widely separated teeth; space between hind ocelli equal to about two-thirds the distance between them and eyes; antennæ rather long, the scape not much longer than the pedicel and following two joints united, first joint of flagellum distinctly longer than joints two and three united, ultimate joint as long as, or longer than, the two preceding, the tip of antenna not curled, but hooked; pronotum sharply margined anteriorly, not dentate laterally, strongly punctured; dorsulum similarly punctured, with a smooth, slightly raised line anteriorly in the middle, and posteriorly with two strongly impressed lines which diverge anteriorly; scutellum impressed; postscutellum entire; middle segment rugoso-punctate except the nearly smooth sides and two areas on upper surface laterally, broadly and deeply sulcate down middle, the upper surface separated from the sides by an indistinct carina; stem of petiole about as long as first hind tarsal joint, stout, the swollen portion elongate-ovate, with large, widely separated punctures; pedicel of second short, its length not equal to width of apex of petiole, the body of the segment gradually dilated very much as in *fraternus*, with sparse shallow punctures above, and an oblique linear impression on each

side near base; remaining dorsals more strongly punctured, the second ventral with coarse irregular punctures; wings dark violaceous; second submarginal triangular, with a very small radial side, the first and second transverso-cubital veins nearly uniting above; third submarginal broadest above, the outer nervure gently bowed. Length 13-14 mm.

Chapada, January and March. *Z. rufipes* is very similar to *Z. fraternus* in general appearance, but is quite distinct.

*Zethus cristatus* n. sp.

Black; thorax and abdomen with thin silky pile; a dot behind the base of each antenna, a linear spot on each side of pronotum anteriorly, dot on tegulæ anteriorly, line on postscutellum interrupted medially, spot at tip of fore femora, one at base of four anterior tibiæ, and a fascia at apex of abdominal segments 1-5 (that on segment 1 extending a short distance along sides), yellow; wings subhyaline, fuscous along costa, nervures black.

♀.—Head with strong deep punctures, running into striæ on front and becoming sparse on cheeks which are shining; clypeus fully twice as broad as long, coarsely striato-punctate, angulate at sides, the fore margin slightly incurved, with two strong widely separated teeth; antennæ with flagellum short, clavate, its first joint much shorter than the following two united, the scape fully as long as the combined length of pedicel and following four joints; space between hind ocelli equal to a little more than half of that between them and eyes; pronotum strongly cristate, slightly dentate laterally, deeply punctured; dorsulum coarsely punctured, confluent so anteriorly, more sparsely posteriorly, strongly impressed anteriorly in the middle, and with two impressions, nearly parallel, posteriorly; scutellum impressed; middle segment impressed, concave, the convex portions rugoso-striate, the rugæ extending a little on the sides, which are nearly smooth and are separated from the upper surface by a carina; basal stem of petiole about as long as hind coxæ and trochanters, the swollen portion elongate-ovate, but not much narrowed posteriorly, with scattered shallow punctures; second segment with pedicel short and thick, shorter than the width of apex of petiole, finely and very closely punctured, except a few shallow punctures along the apical margin, the ventral surface with the punctures larger and less close, but not

strong; remaining segments very finely punctured; second submarginal cell with a radial side about equal to half the distance between the recurrent veins on the cubital vein; third submarginal rhomboidal, the outer nervure nearly straight. Length 15 mm.

Chapada, April. One specimen. The coloration of wings is similar to *Z. fraternus*. The short flagellum and wide laterally angulate clypeus, cristate pronotum, and markings, distinguish *Z. cristatus*.

aa. Postscutellum carinated, dentate, or emarginate.

*Zethus imperfectus* n. sp.

Black, with thin silky pile, most evident on thorax on sides and beneath and second segment; lateral margins of clypeus, line on inner margin of mandibles, spot in each eye emargination and at bases of antennæ spot on cheeks above, line on pronotum anteriorly, dot on tegulae at base and apex, line on postscutellum, stripe on fore femora behind, and on all the tibiae, and apical margins of all segments, including the sixth dorsal, yellow, that at apex of petiole continued a short distance along sides; flagellum beneath reddish yellow, except basally; wings subhyaline, slightly brownish in costal cell.

♀.—Head with deep separated punctures, sparse on cheeks; clypeus rounded at sides, its length equal to considerably more than half its width, closely and finely punctured and in addition with some larger, shallow, sparse punctures, its fore margin subemarginate, indistinctly dentate at each side; an indistinct T-shaped carina between antennal bases; flagellum short, clavate, the scape slender, cylindrical, scarcely dilated apically, in length not quite equal to pedicel and following four joints united; space between hind ocelli equal to nearly two-thirds of that between them and eyes; pronotum cristate, not dentate, with very coarse punctures; dorsulum with the punctures more separated, anteriorly with a shallow impressed line medially, the usual posterior impressed lines or furrows, entirely wanting; scutellum scarcely impressed, with shallower punctures; postscutellum very indistinctly dentate laterally; middle segment concave, medially sulcate, the concavity smooth, that portion between the concavity and sides, rugose, bounded externally by a carina, sides finely punctured, subeari-

nate obliquely in middle; basal stem of petiole stout, about as long as joints 2-4 of hind tarsi, the swollen portion elongate, cylindrical, narrowed posteriorly, strongly punctured, its anterior and upper surface forming a distinct angle at their junction; pedicel of second segment rather slender, its length not equalling the width of apex of petiole, the dorsal and ventral moieties closely and finely punctured, except along apical margins; second submarginal with a distinct radial side which equals the distance between the first transverso-cubital and first recurrent nervures on the cubital nervure; third submarginal enlarged above, the outer nervure a little sinuous. Length 12 mm.

Santarem. One specimen. Resembles *Z. cristatus*, but the clypeus is differently shaped, etc.

*Zethus cylindricus* n. sp.

Black; abdomen with sericeous pile; three spots on clypeus (one at each side and anteriorly), line on mandibles, dot behind base of each antenna, scape beneath, dot in eye emargination and at top of cheeks, line on pronotum anteriorly, dot at base and apex of tegulae, line on postscutellum interrupted medially, two lines on middle segment, and apical margin of all abdominal segments (including sixth dorsal), yellow; wings subhyaline, slightly discolored in costal cell.

♀.—Head with coarse, deep, close punctures, the cheeks less punctured, but not shining; clypeus at base medially with a short carina extending up between bases of antennae, barely one-third broader than long, rounded at sides, truncate anteriorly; antennae with flagellum strongly clavate, the first joint much shorter than the two following united, the scape not quite as long as pedicel and following four joints united; space between hind ocelli greater than that between them and eyes; pronotum cristate anteriorly, subdentate laterally, with coarse separated punctures; dorsulum with confluent punctures forming longitudinal rugae, with a raised line anteriorly in the middle, and two longitudinal impressions posteriorly; scutellum punctured like dorsulum, scarcely impressed; postscutellum slightly prominent at sides, but not dentate; middle segment concave and sulcate medially, transversely rugose, the rugae slightly running over the ridge which separates the sides from upper surface, sides nearly smooth, apex furnished with two pale, lamellae



or teeth; petiole elongate, stem stout, hardly as long as hind coxæ and trochanters, the enlarged portion cylindrical, broadest basally, its narrowest point is a little before the apex where it is contracted, with deep separated punctures above at base, those toward apex shallower and sparse, ventral surface sharply carinated down middle; second segment finely and closely punctured, except along apical margins, the pedicel quite short, much shorter than the apex of petiole is wide; radial side of second submarginal cell distinctly greater than the distance between the first transverso-cubital vein and first recurrent nervure on the cubital nervure; third submarginal slightly broader above, somewhat rhomboidal, the outer nervure gently sinuous. Length 11–12 mm.

♂.—Clypeus about twice as broad as long, entirely yellow, obliquely truncate at sides, subemarginate anteriorly; antennæ hooked at tip, the last two joints minute, the penultimate the longer, third joint about one-third longer than second, the tenth subspinose beneath at apex; middle segment with an additional carina on each side bounding the concavity. Length 8–10 mm.

Chapada, December; Corumbá, April. Three ♀, four ♂ examples. In the shape of petiole this species approaches *Z. carinatus* Smith, but in that species it is not contracted before base, and is rugosely punctured and sharply carinate above.

*Zethus campanulatus* n. sp.

Black; legs brownish; a medially interrupted yellow fascia at apex of petiole; abdomen and thorax more or less with sericeous pile; wings fuscous on basal two-thirds especially in the costal cell, otherwise subhyaline.

♀.—Head above with even, deep, separated punctures, running into longitudinal rugæ on front and becoming sparser on cheeks which are shining; no carina between bases of antennæ; clypeus fully three times broader than long, angulate at sides, coarsely rugoso-punctate, fore margin truncate, with a tooth at each side and sometimes medially; flagellum short, the first joint not as long as the two following united, the scape fully as long as the pedicel and following four joints united; space between hind ocelli equal to a little more than half of that between them and eyes; pronotum suberistate, sharply angular at sides with coarse confluent punctures; dorsulum with larger separated punctures, with an

impressed line anteriorly in middle, two impressed lines posteriorly; scutellum with shallow punctures, scarcely impressed; postscutellum prominent or subcarinate laterally, middle segment concave medially, the concavity bounded outwardly by a more or less distinct carina, the two convexities irregularly rugose, separated from sides by a comparatively indistinct carina; petiole short, campanulate, stem slender fully as long as hind coxæ and trochanters, the enlarged portion with large separated punctures; second segment finely and closely punctured throughout, the pedicel short and stout, much shorter than apex of petiole is wide, the body of the segment more suddenly dilated than in *cylindricus*, *imperfectus*; radial side of second submarginal cell much less than the distance between the first transverso-cubital vein and the first recurrent vein on the cubital nervure; third submarginal somewhat rhomboidal slightly larger above, the outer nervure gently sinuous. Length 13-14 mm.

*Var.*—Legs more or less dark ferruginous, the base of first or second segments sometimes brownish.

♂.—Front and clypeus without rugæ; clypeus longer, rounded at sides subemarginate between the lateral teeth; tip of antennæ hooked, the last two joints of antennæ quite small, the penultimate the smaller, as to length; middle segment supplied with two additional carinæ which border the concavity outwardly; second segment with larger, sparse, shallow punctures. Length 12 mm.

Chapada, March. Five ♀, one ♂ specimens.

*Zethus dubius* Sm.

Corumbá, April. In the two specimens which I refer to this species the postscutellum is tuberculate medially, and there is a T-shaped carina between the insertion of antennæ. The ♂ antennæ are hooked, with the last joint as long as preceding two united.

*Zethus hexagonus* n. sp.

Black; dot behind each antenna, one at each side of postscutellum and a line (a little continued along sides) at apex of petiole, yellow; legs from tips of femora reddish brown, which color sometimes extends obscurely to the coxæ; wings fuscous, slightly cæruleous, quite dark in the costal cell.

♀.—Head above with strong separated punctures, on the front

striato- or rugoso-punctate; clypeus forming a nearly exact hexagon, coarsely striato-punctate, the fore margin rather broadly and evenly truncate; space between hind ocelli about equal to two-thirds of that between them and eyes; pronotum cristate, obtuse at sides, irregularly rugoso-punctate; dorsulum with rather shallow, separated punctures, with a feeble impressed line anteriorly in the middle, and four impressed lines posteriorly, the two inner ones strong and deep, the outer ones shallow, and indistinct; scutellum more closely punctured, impressed; postscutellum subemarginate, that is to say the lateral angles are quite prominent, subdentate; middle segment not broadly concave, broadly furrowed, rather densely pubescent with pale hairs, the convexities rugose but not coarsely, carina between sides and upper surface indistinct except toward base, sides finely punctured; stem of petiole rather long, slender, longer than hind coxæ and trochanters, the enlarged portion of segment a little more than twice as long as broad, rounded at base, with large punctures, the sides rounded out; second segment above finely and closely punctured at base, the punctures becoming larger and shallow toward apex, the ventral surface with tolerably large punctures, sparsest medially, and entirely wanting at base, which is smooth and shining, pedicel very short and stout at least one-third broader than long; radial side of second submarginal cell barely equalling half the distance between the first transverso-cubital and first recurrent nervures on the cubital nervure; third submarginal cell widened almost one-third above, the outer nervure nearly straight. Length 14-15 mm.

Chapada, March and October. Three specimens. The petiole, compared with *Z. fraternus*, has a long stem, the enlarged portion short and broad.

*Zethus bicolor* n. sp.

Head, antennæ, dorsulum, scutellum anteriorly, mesosternum, and body of abdomen, black; otherwise the body red; two dots on front, pronotum anteriorly sometimes, spots on tegulæ rarely, two dots on postscutellum and line at apex of petiole, yellow; wings fuseo-violaceous.

♀.—Head with strong separated punctures, the front striato-punctate; clypeus hexagonal, broader than long, striato-punctate, the fore margin truncate, with a slight tooth on each side; space

between hind ocelli equal to slightly more than half of that between them and eyes; pronotum cristate, obtuse at sides, with coarse more or less confluent punctures; dorsulum with separated punctures, anteriorly with an impressed line medially and four impressed lines posteriorly, the inner two of which are deep, the others indistinct; postscutellum prominent, or subdentate at sides; middle segment broadly furrowed, the convexities rugose but not coarsely, the carina between upper and lateral surface distinct; petiole as in *Z. hexagonus*, as are also the pedicel and sculpture of dorsal surface of second segment, the punctures of the ventral surface of the latter segment present on the base; first and second transversocubital veins uniting above; third submarginal cell widened nearly one-quarter above. Length 17-18 mm.

♂.—Front closely striato-punctate; antennæ hooked at apex, the ultimate joint as long as the two preceding united, the penultimate quite small, flagellum short, the first joint fully as long as the following two joints united; clypeus about twice as broad as long, the anterior teeth more distinct. Length 13 mm.

Chapada, March and February. Eight ♀ and one ♂ specimens. Seems to resemble *Z. rufinodus* in coloration, but judging from the figure of that species given by Saussure (Pl. vi, f. 3, *Vespides*, iii), the petiole is of an entirely different shape.

*Zethus pallidus* Sm.

Santarem. One example. This species has the postscutellum strongly bidentate, almost bispinose and the dorsulum has two smooth raised lines; the petiole campanulate. The entire insect is rather densely covered with short brownish or yellowish hairs.

*Zethus productus* n. sp.

Rufous and black; body of abdomen with brown pile; clypeus, mandibles, antennæ except scape beneath, thorax except beneath, legs and abdomen from and inclusive of apex of second segment rufous; dot behind each antenna, scape beneath and line at apex of petiole, yellow; otherwise the insect black; wings fusco-violaceous.

♀.—Head above and on cheeks rugoso-punctate, the front coarsely striato-punctate; clypeus somewhat hexagonal, broader than long, obtuse at sides, with large rather shallow punctures, the fore margin broadly subtruncate, indistinctly or subdentate laterally; a T-shaped carina between the bases of antennæ; first joint of flagellum about as long as the following two united, the scape

not longer than pedicel and following three joints united; space between hind ocelli greater than that between them and eyes; pronotum cristate, acute and produced at sides, with coarse confluent punctures; dorsulum rugoso-punctate with a shallow impressed line anteriorly in middle, the usual posterior impressed lines absent; scutellum not impressed; postscutellum broadly emarginate, dentate at sides; two short indistinct carinae originate near sides of postscutellum, and extend down on middle segment, the latter broadly furrowed or depressed down middle, the two convexities obliquely striated, the striae overrunning the sharp lateral carina a short distance upon the sides, which are otherwise quite smooth; petiole with stem long, nearly as long as first hind tarsal joint, stout, the enlarged portion ovate, broadest at apex, gradually and evenly enlarged from its junction with the stem to somewhat behind its middle, whence it is gradually and slightly narrowed to apex, the punctures strongest at sides, and down the middle there is a distinct, but not sharp, carina, which, while not continuous, is found also on the stem; second segment finely and closely punctured above, much more strongly so beneath, the pedicel very short and thick; radial side of second submarginal cell about equal to the distance between the first transverso-cubital and the first recurrent nervures on the cubital nervure; third submarginal widest above, the outer nervure nearly straight. Length 16-17 mm.

♂.—Colored like ♀, except that the red is more widely diffused over the abdomen, and the mandibles are yellowish; flagellum stout, hooked at tip the ultimate joint thick, obtuse at tip, longer than the penultimate which is minute, and together with the eleventh joint is nearly twice as long as the ultimate; middle segment rugose, the carinae originating near each side of postscutellum quite strong; stem of petiole shorter and thicker, carina obscure, the enlarged portion more robust and coarsely punctured. Length 14 mm.

Chapada, January, March, April, December. Fifteen ♀, one ♂ specimens. The strongly produced pronotal angles, rugosity of head, and carinated petiole are peculiarities of this species.

*Zethus thoracicus* n. sp.

Black; head (except front and a line across vertex), pronotum entirely, tegulae, two spots on scutellum and postscutellum, two

lines on middle segment, spot beneath wings, anterior legs almost entirely, medial legs in front, line at apex of petiole, interrupted medially, narrow line before apex of second and third dorsals, and of second ventral, yellow; antennæ fulvous, darkest above, the fore femora in front and a spot on tegulae, reddish; medial legs dark brownish behind; wings dark subhyaline, darkest along costal margin.

♀.—Head finely and closely punctured above, the front striato-punctate, but not coarsely; cheeks impunctate; clypeus rather finely striato-punctate, barely one-third broader than long, somewhat hexagonal, with the side lying between the lateral angle and anterior margin strongly incurved, anterior margin obtusely truncate, not at all dentate; flagellum subclavate, the first joint shorter than the two following united, the scape about as long or slightly longer than the pedicel and following three joints united; space between hind ocelli about equal to half that between them and eyes; thorax elongate, narrowed anteriorly, the distance between the anterior margin of tegula and pronotal angle greater than the width of dorsulum at widest part; pronotum sharply margined, subangulate at sides, with separated punctures; dorsulum and scutellum finely striated longitudinally; postscutellum indistinctly carinated at sides; middle segment concave or depressed medially, rugose but not coarsely, with a carina originating near each side of postscutellum and diverging toward sides, which are smooth except in the region of the obtuse lateral carina where there are some coarse punctures; stem of petiole short and thick, not equaling hind coxa and trochanter in length, the enlarged portion of petiole broadly ovate, widest toward base, finely punctured medially and coarsely so at sides; second segment above with fine compact punctures, beneath with large separated ones, the pedicel short and thick; the third dorsal is margined apically with a thin membrane which is emarginate near each side; radial side of second submarginal cell slightly greater than the distance between the first transverso-cubital and the first recurrent nervures on the cubital nervure; third submarginal cell somewhat rhomboidal, the outer nervure sinuous. Length  $12\frac{1}{2}$  mm.

Chapada. One specimen. In coloration this species is quite similar to *Z. miniatus*, but it is not closely related to that insect. The peculiarly shaped accessory membrane of third dorsal segment is

similar to that described and figured by de Saussure as occurring on the second segment of *Z. lobulatus*; and the coloration of *Z. thoracicus* and *lobulatus* seems to be very similar. But the fact that *lobulatus* has the pronotum spinose laterally, and with a short, coarsely punctured thorax, shows that they are not closely related. In the length of thorax, *Z. thoracicus* differs from all the other species in the present collection.

*Zethus ferrugineus* Sauss.

Four specimens from Santarem. These specimens differ from the description in some points of coloration, and as no structural characters whatever are given by de Saussure, I am not certain that these specimens really represent *Z. ferrugineus*.

*Zethus chrysopterus* Sauss.

A single specimen from Santarem. *Z. sculpturalis* Smith is probably identical with this species.

*Zethus rugosiceps* n. sp.

Black; spot at sides of clypeus, dot behind each antenna, in emargination of eye, short stripe on mandibles near base, scape beneath, pronotum anteriorly, base and apex of tegulae, line on postscutellum; spot near apex of four anterior femora beneath, stripe on their tibiae, line at apex of petiole and a slender one before apical margin of segments 2 and 3, yellow; wings subhyaline, darker in marginal cell, and slightly stained with yellow.

♀.—Head coarsely rugoso-punctate including cheeks and front; clypeus a little less coarsely punctured, convex, not quite twice as broad as long, the fore margin smooth, broadly subtruncate or incurved; flagellum clavate; scape about as long as pedicel and following three joints united; space between hind ocelli equal to or a little greater than that between them and eyes; pronotum cristate, spinose at sides, rugoso-punctate; dorsulum with coarse separated punctures with a raised line anteriorly in the middle, and two short, indistinct, impressed lines posteriorly; post-scutellum sharply carinated at sides and with a short tooth-like carina medially; middle segment concave, the concavity smooth and bounded externally by a sharp carina, beyond which the middle segment is rugose as far as and slightly beyond the sharp lateral carina; stem of petiole fully as long as hind coxa and trochanter, the enlarged portion elongate-ovate with large separated punctures; the petiole

much as in *Z. fraternus*, but with a longer stem and narrower enlarged portion; second segment above finely and closely punctured, beneath with large separated punctures, smooth at base, the pedicel short and stout; no distinct radial side to the second submarginal cell, the first and second transverso-cubital veins almost coalescing above. Length 16 mm.

Santarem. One specimen.

*Zethus proximus* n. sp.

Black; dot behind each antenna, line on pronotum anteriorly, dot at base and apex of tegulæ, at each side of scutellum and postscutellum, a stripe on four anterior tibiæ, line at apex of petiole emarginate anteriorly and continued a little along sides, and a line on segments 2-4, that on the dorsal segments emarginate anteriorly in the middle, yellow; in ♂ a line on mandibles, clypeus anteriorly and scape beneath, yellow; head and thorax with thin hoary pile, that on second segment brownish in certain lights; wings pale subhyaline, slightly brownish in costal cell.

♀.—Head coarsely rugoso-punctate including cheeks and front; clypeus with large shallow punctures, about or nearly twice as broad as long, its fore margin broadly subtruncate, subdentate laterally; a tolerably distinct T-shaped carina between antennæ; space between hind ocelli about equal to that between them and eyes; scape slender, but barely as long as pedicel and following three joints united; pronotum cristate, spinose laterally, rugoso-punctate; dorsulum with large separated punctures, sparse medially, with an impressed line anteriorly in the middle and two indistinct ones posteriorly; postscutellum carinated and subdentate laterally, not carinated or tuberculate medially; middle segment concave, the concavity nearly smooth and bounded externally by a carina, between which and the lateral carina the segment is rugose, the rugæ not extending on sides, but the lateral carina is margined externally by a row of foveæ; stem of petiole shorter than hind coxa and trochanter, stout, the enlarged portion elongate-ovate, scarcely narrowed apically, with coarse separated punctures; second segment finely and closely punctured, beneath the punctures large and sparse, the pedicel short and thick; second submarginal cell with a radial side nearly equalling the distance between the first transverso-cubital and first recurrent nervures on the cubital



nervure; third submarginal cell rhomboidal higher than long, not widened above, the outer nervure nearly straight. Length 13 mm.

♂.—Much more coarsely sculptured than ♀; clypeus anteriorly, scape beneath, line on mandibles also yellow; clypeal teeth distinct; space between hind ocelli distinctly greater than that between them and eyes; first joint of flagellum a little shorter than following two united; the two terminal joints minute, the ultimate joint but little if anything longer than the penultimate. Length 11 mm.

Corumbá, April; Uacarizal, February. Two specimens. This species is very close to *Z. rugosiceps*, but is smaller, the head less ornate with yellow, the clypeus a little broader, the dorsulum with an impressed line anteriorly, and the petiole is broader and more coarsely punctured.

*Zethus diminutus* n. sp.

Black, with tolerably distinct hoary pile; dot behind each antenna, in the emargination of eye, a small one on cheeks, pronotum anteriorly, dot at base and apex of tegulæ, two spots on scutellum and postscutellum, anterior tibiæ in front, line at apex of petiole bidentate or emarginate anteriorly, and a line on apical margin of segments 2-5, emarginate anteriorly in middle, yellow; second dorsal somewhat brownish at each side near base, with brownish pile; wings subhyaline, fuscous along costal margin.

♀.—Head with shallow, separated punctures; cheeks subcarinate down middle; clypeus similarly punctured, convex, barely twice as broad as long, its fore margin with three widely separated teeth, the medial one smallest; an indistinct T-shaped carina between antennæ; space between hind ocelli if anything slightly greater than that between them and eyes; pronotum cristate, angularly produced or subdentate at sides, rugoso-punctate; dorsulum with large rather shallow punctures, anteriorly with a shallow impression in middle, posteriorly with two indistinct ones; postscutellum carinated laterally, depressed medially; middle segment concave medially, the concavity bounded outwardly by a carina, the space beyond this carina roughened and with some shallow punctures (but it can scarcely be called rugose); sides near lateral carina with distinct shallow punctures; petiole with basal stem a little longer than hind coxa and trochanter, the enlarged

portion elongate-ovate, rather narrowed and scarcely narrowed to apex with large punctures strongest on sides; second segment above compactly punctured, beneath with large separated punctures, smooth at base, the stem short, not as long as the width of apex of petiole, but still it is more evident than in *proximus* or *rugosiceps*; radial side of second submarginal cell shorter than the distance between the first transverso-cubital and first recurrent nervures on the cubital nervure; third submarginal higher than long, the outer nervure gently sinuous. Length 12 mm.

Corumbá, April. One specimen. Resembles *proximus* and *rugosiceps* in coloration, but the sculpture of head is different.

*Zethus coriarius* n. sp.

Black; abdomen with sericeous pile; a linear spot at each side of apical margin of petiole, yellow; wings subhyaline, with anterior half of costal cell black.

♀.—Head with large, close, shallow punctures; clypeus convex about twice as broad as long, fore margin broadly subtruncate, subdentate laterally, an indistinct T-shaped carina between antennæ; flagellum strongly clavate, the first joint distinctly shorter than the following two united; space between hind ocelli equal to or slightly greater than the distance between them and eyes; pronotum cristate, subdentate or angularly produced at sides; rugosopunctate; dorsulum with coarse separated punctures with a shallow impressed line anteriorly in the middle, the usual posterior impressions entirely wanting; scutellum and postscutellum coarsely punctured, dentato-carinate laterally; middle segment not rugose, tolerably smooth, coriaceous, concave medially with two converging carinæ running from postscutellum and quite sharp at base, lateral carina distinct; petiole subcampanulate, stem longer than hind coxa and trochanter, slender, enlarged portion with large separated punctures, a little narrowed to apex; second segment above with shallow punctures except toward base which is smooth or finely punctured, ventral surface with larger punctures, smooth and shining at base, pedicel short and stout; radial side of second submarginal cell about equal to the distance between the first transverso-cubital and first recurrent nervures on the cubital nervure; third submarginal cell higher than long, rhomboidal, the outer nervure nearly straight. Length 12 mm.

Chapada, March and November. Two specimens. The almost smooth, leatherlike surface of middle segment is characteristic of this species.

*Zethus notatus* n. sp.

Black; abdomen with pale sericeous pile; mandibles except tips, broad line surrounding the anterior and lateral portions of clypeus, spot at each side of face, behind each antenna, in the eye-emargination, at summit of eyes, stripe on posterior orbits, spot at each side of pronotum anteriorly, beneath wing and at each side of scutellum, outer margin of tegulae, large spot on fore femora near apex, their tibiae in front, stripe on medial tibiae, line at apex of petiole and a slender one at apex of segments 2 and 3, yellow; wings subhyaline, a fuscous cloud in the costal cell anteriorly.

♀.—Head flat, the front and vertex finely striato-punctate; clypeus subtilely striato-punctate, shaped as in *Z. thoracicus*, about one-third broader than long, the fore margin broadly produced, subtruncate or subrounded, the side lying between the lateral angle and anterior margin incurved; no carina between antennae; the latter with flagellum subclavate, the first joint a little shorter than the following two united; space between hind ocelli somewhat depressed, a little less than that between them and eyes; thorax elongate, the prothorax lengthened, narrowed and sharply margined anteriorly, subdentate laterally, with strong separated punctures; dorsulum nearly one-third longer than broad, rather subtilely striato-punctate; suture between dorsulum and scutellum coarsely foveolate, the latter impressed; postscutellum subcarinate laterally; middle segment depressed or subconcave medially with two sharp slightly diverging carinae beginning one at each side of postscutellum, the depressed surface lying between them with not very strong transverse rugae, the surface between them and the feeble lateral carina covered with deep rounded holes, somewhat resembling reticulations, sides smooth at base, coarsely punctured above and posteriorly; enlarged portion of petiole subtruncate anteriorly, its junction with the basal stem forming an angle when viewed from side and transversely carinated, the enlargement is stout, widest at base, strongly contracted just before the apex, the upper surface very coarsely punctured especially basally, carinated down middle, and with a strong depression before apex, the ventral surface bear-

ing a large Y-shaped carina; second segment with pedicel short and stout, the dorsal surface finely and closely punctured, ventrally with larger separated punctures, sparse toward base; second submarginal with no radial side, the first and second transverso-cubital veins uniting above. Length 9 mm.

♂.—Very much like ♀; flagellum fulvous beneath and at tip, the first joint about one-third longer than second, apical joint truncate, stout, about twice as long as the penultimate, the eleventh joint broader, but still smaller than tenth; pronotum sharply dentate; sculpture a little coarser than in ♀. Length 9 mm.

Santarem. Two specimens. This species and *Z. thoracicus* are clearly allied in the shape of thorax and fine sculpture of head and dorsulum, shape of clypeus, etc. The postscutellum and middle segment are not strongly carinate in *thoracicus*, however.

*Zethus inconstans* n. sp.

Black; line on pronotum anteriorly, twice interrupted, spot at apex of fore femora, broad stripe on fore and medial tibiae, line at apex of petiole, and a narrow line before apex of dorsal segments 2 and 3; wings subhyaline fuscous along anterior half of costal and marginal cells.

♀.—Head with large punctures, the front having the appearance of being reticulate; clypeus convex, silvery pubescent, with shallow punctures, about one-third broader than long, the fore margin polished, dentate at each side; flagellum strongly clavate, the first joint considerably shorter than the two following united; space between hind ocelli about equal to that between them and eyes; pronotum cristate, sharply dentate at sides, rugoso-punctate; dorsulum with coarse punctures, anteriorly in middle with a raised line, and medially with two somewhat parallel, longitudinal carinae or folds, the usual posterior impressions absent; postscutellum carinate laterally and dentato-carinate medially; middle segment depressed or subconcave medially with a sharp carina beginning at the sides of postscutellum, the surface between this carina and the very sharp lateral one, rugose, sides with some coarse striae posteriorly; petiole with stem about as long as hind coxa and trochanter, the enlarged portion elongate, narrow, barely narrowed apically, with large sparse punctures; second segment finely and compactly punctured above, beneath with large sepa-

rated punctures, except the base which is smooth, stem almost as long as the apex of petiole is wide, more slender than in allied forms; second submarginal cell with no radial side in consequence of the union of the first and second transverso-cubital veins above; third submarginal widest above, the outer nervure nearly straight. Length  $11\frac{1}{2}$  mm.

*Var.*—Much more coarsely sculptured; no yellow on legs; a small radial side on second submarginal cell, the third submarginal but little widened above. Length 12 mm.

Santarem; Mararu. Two specimens, that representing the variety coming from the latter locality.

*Zethus miniatus* Sauss.

Uacarizal, February; Chapada, March; Corumbá, April. Three ♀, four ♂ specimens.

*Zethus carinatus* Sm.

Twenty-four specimens; Chapada, January, February, November; Corumbá and Pedra Branca, April. This insect is evidently very similar to *Labus Sicelianus* Saussure. Both sexes have 4-jointed labial palpi.

AA. Pedicel of second segment longer than width of first segment at apex.

*Zethus punctatus* n. sp.

Black; spot on each side of face, dot on pronotum laterally, line on postscutellum, two stripes on middle segment, short line on sides of petiole at apex, and two dots at base of pedicel of second segment; an extremely narrow line at apex of dorsals 2-5, and two dots on segment 6 sometimes, yellow; stripe on all the tibiae, and fore femora anteriorly on the tibiae and tarsi entirely, yellow or fulvous; wings caeruleous. The abdominal maculation is variable.

♀.—Front with coarse confluent punctures, becoming more separated and shallow on the vertex; cheeks smooth or finely punctured posteriorly, coarsely punctured near base of mandibles, and less coarsely along the eye margin; clypeus not quite twice as broad as long, with coarse, shallow punctures, the fore margin broadly truncate medially, not dentate; flagellum subelavate, the first joint about as long as the two following united; space between hind ocelli about equal to that between them and eyes; pronotum

cristate, not dentate; dorsulum with strong, separated punctures throughout, with a raised line anteriorly in middle, the posterior impressions indistinct; scutellum rather flat, impressed, punctured about like dorsulum; postscutellum entire; middle segment, concave or depressed medially, finely striated except in depressed middle, the lateral carina very short only present at base; stem of petiole short and stout, the enlarged portion fusiform, strongly punctured except toward apex where the punctures are finer and quite dense; second segment finely and closely punctured above, the ventral surface smooth at base, and with large sparse punctures apically, stem long and slender, about as long as first hind tarsal joint, with distinct separated punctures; second submarginal cell with a radial side which is fully equal to the distance between the first transverso-cubital and first recurrent nervures on the cubital nervure; third submarginal rhomboidal, higher than long, scarcely broadened above, the outer nervure gently sinuous. Length 19-21 mm.

♂.—Colored like ♀, but with a yellow stripe on anterior margin of clypeus and on mandibles; sculptured more coarsely than in ♀; antennæ hooked at tip, the ultimate joint obtusely pointed, much longer than the penultimate, the two together not much longer than the eleventh joint. Length 18 mm.

Chapada, January, March, November, December; Corumbá, April. Thirteen ♀ and two ♂ examples. In this species, which may be the same as *Z. Smithii* Sauss., the male has the fourth joint of labial palpi distinct, whereas in the ♀ it is rudimentary. This peculiarity seems to exist in several species of the section *Didymogastra*.

***Zethus simillimus* n. sp.**

Very close to *punctatus* in coloration; but having all the femora more or less reddish, and there is no yellow on hind tibiæ, while abdominal segments 3-6 are broadly margined with, or entirely, yellow; otherwise colored as in *punctatus*.

♀.—Front rather closely striato-punctate, the vertex finely and closely punctured; clypeus twice as broad as long, with strong shallow punctures becoming deeper anteriorly, the fore margin dentate, or subdentate at each side, and very indistinctly so medially; dorsulum with strong punctures becoming sparse and weaker

medially; dorsulum convex; impressed; middle segment as in *punctatus* but more strongly striated; petiole practically the same as in *punctatus*, the pedicel of second segment a little longer and more slender; outer nervure of third submarginal cell strongly sinuous. Length 21 mm.

Chapada, January and March. Two specimens. May be but a variety of *Z. punctatus* notwithstanding the difference of sculpture.

*Zethus emarginatus* n. sp.

Black; short line on scape beneath at base, crescent-shaped mark at apex of clypeus, inner orbits near base of clypeus, dot behind each antenna and on cheeks near top, one on tegulæ anteriorly, line on postscutellum, two spots on middle segment near insertion of petiole, line on each side of petiole on apical half, dot at each side of base of pedicel of second segment, a short line on its sides, and a narrow one on the apical margin of segments 2-6, yellow; tibiæ and the femora except hind pair, more or less reddish; antenna beneath toward apex fulvous, joints 8-11 margined with pale yellow apically; wings dark subhyaline, fuscous along costal margin.

♂.—Head deeply punctured, closest and smallest on vertex and occiput, confluent so on front; cheeks except along the eye margin and near base of mandibles, smooth; clypeus with separated shallow punctures, covered with pale pubescence, fully twice as broad as long, the fore margin armed with two widely separated teeth; a T-shaped carina between antennæ; the latter with the flagellum robust, tolerably long, the first joint a little shorter than the two following united, the apical joint obtusely pointed, if anything, shorter than the two preceding joints united, joints 9 and 10 emarginate beneath at apex, especially the tenth; a raised line runs back from the anterior ocellus; hind ocelli margined outwardly by a furrow or pit, the space between them if anything slightly greater than that between them and eyes; pronotum cristate, not dentate or angulate, strongly punctured; dorsulum strongly punctured, closest anteriorly, with an impressed line medially in front, the usual posterior impressions indistinct; dorsulum similarly punctured, impressed; postscutellum entire; middle segment sulcate medially, rugoso-striate, finely striate on sides, the

lateral carina only present at base; stem of petiole about as long as hind coxa. the enlarged portion somewhat fusiform, but broadest basally, with fairly strong, separated punctures; second segment above with fine close punctures basally, those apically becoming larger and sparser, the ventral with strong, separated punctures except toward base which is smooth, pedicel slender, nearly as long as one-third the length of segment, shorter than first hind tarsal joint; radial side of second submarginal cell nearly as great as the distance between the first transverso-cubital and first recurrent nervures on the cubital nervure; third submarginal cell distinctly broadened above, the outer nervure gently sinuous. Length 14 mm.

Corumbá, April. One specimen.

*Zethus Hilarianus* Sauss.

Five ♀, one ♂, specimens. Chapada, March and December; Uacarizal, February.

*Zethus coloratus* n. sp.

Rufous in greater part; the following parts black: front, tips of mandibles, cheeks on lower part, flagellum above from apex of third joint, sutures of thorax and its ventral surface entirely, a blotch on the enlarged portion of petiole, second segment except base and apex, and base of third segment; otherwise the insect rufous, the coloration varying but little; wings fuscous, with purplish effulgence.

♀.—Head with strong, shallow, confluent punctures, the front longitudinally rugose; clypeus more than twice as broad as long, more strongly punctured than the rest of head, the fore margin armed with a tooth laterally; a small tubercle between the bases of antennae, flagellum subclavate, the first joint as long as the second, third and about half of fourth joints united; space between hind ocelli distinctly less than that between them and eyes; pronotum cristate, with coarse, close punctures indistinctly subdentate laterally; dorsulum rather closely punctured at base and apex, otherwise more sparsely, with an impressed line anteriorly and medially with two longitudinal swellings or raised lines, the posterior impressed lines tolerably distinct; postscutellum transversely compressed, with a small tubercle medially; middle segment depressed medially rather coarsely striated transversely,



indistinctly or finely so on sides, the lateral carina only evident at base; stem of petiole a little longer than hind coxa, the enlarged portion broadest and rounded basally, strongly punctured, contracted just before apex; second segment above compactly punctured, beneath with large sparse punctures, smooth at base, and covered with short hairs, the pedicel rather thick, distinctly shorter than the first hind tarsal joint; radial side of second submarginal cell distinctly shorter than the distance between the first transverso-cubital and first recurrent nervures on the recurrent nervure; third submarginal cell enlarged above, the outer nervure gently sinuous. Length 20–21 mm.

♂.—Sculpture coarser than in ♀; clypeus about twice as long as broad, its teeth acute; first joint of flagellum but slightly longer than the following two joints united, the ultimate joint quite minute, much smaller than the penultimate, the two together scarcely longer than the eleventh joint, which is deeply emarginate beneath at apex. Length 16 mm.

Chapada, January and March. Five ♀, one ♂ specimens.

*Zethus aurulens* Sauss.

Four ♀, one ♂ specimens. Chapada, March and April; Santarem.

*Zethus peculiaris* n. sp.

Black; abdomen polished; front, clypeus, vertex and thorax above clothed with thick, long, yellowish-brown hairs; round spot at each side of clypeus, dot behind the insertion of each antenna, small one at summit of cheeks, line on pronotum anteriorly and on four anterior tibiae, spot at base of tegulae and at apex of four anterior femora, and a small one at each side of apex of petiole, yellow; scape and following three joints entirely and a spot on all the remaining joints beneath rufous; wings subhyaline, a little brownish along costal margin.

♀.—Head with strong separated punctures; clypeus rather long, but little more than one-third broader than long, the fore margin broadly truncate, unarmed; flagellum rather long, subelavate, the first joint a little longer than the following two joints united; space between hind ocelli about equal to that between them and eyes; pronotum cristate, with a few subtile, indistinct punctures, sharply dentate laterally; dorsulum with fine punctures except at

extreme apex where they are large and coarse, anteriorly in middle with a raised line, the usual posterior impressions absent; scutellum punctured posteriorly; postscutellum entire its hind margin angular medially; middle segment scarcely depressed, coarsely striated transversely, the sides likewise striated; stem of petiole fully as long as hind coxa and trochanter, the enlarged portion impunctate, shining, subfusiform, strongly depressed its entire width just before apex, beneath before apex with a shallow pyriform depression which is transversely rugose; second segment above punctured along apical margin only, beneath the punctures more distributed but quite sparse, pedicel slender, distinctly shorter than first hind tarsal joint; remaining segments distinctly punctured; radial side of second submarginal cell slightly greater than the distance between the first transverso-cubital and first recurrent nervures on the cubital nervure; third submarginal cell nearly as long as high, rhomboidal, the outer nervure distinctly but not strongly sinuous. Length 16 mm.

Rio de Janeiro, November. One specimen. Quite remarkable by the densely pubescent head and thorax, sculpture of middle segment and dorsulum and polished, impunctate, petiole and most of second segment.

*Zethus geniculatus* Spin.

Two ♀, two ♂ specimens. Santarem. In the males of the specimens I have referred to *geniculatus*, the ultimate antennal joint is long and remarkably slender and acute, spinelike; it is quite as long as the two preceding joints united.

*Table of New Species of Zethus.*

Pedicel of second segment shorter than width of first segment at apex . . . . .	2
Pedicel of second segment longer than width of first segment at apex . . . . .	19
2. Postscutellum entire, not emarginate, carinate, or dentate . . . . .	3
Postscutellum emarginate, dentate or carinate . . . . .	6
3. Petiole campanulate; wings dark basally, pale apically; pedicel of second segment scarcely evident. . . . .	<i>sessilis</i> ♀♂.
Petiole not campanulate . . . . .	4